

Naming Chemical Compounds Acids, Bases, and Pure Ionic Salts				NAME: _____	P. _____
Binary	Acids	Bases	Salts		
	Hydrogen + Nonmetal		Metal cation + Nonmetal		
No Oxygen			full name ide ending		
		Metal + Hydroxide OH <sup>-</sup>	Metal + Negative Polyatomic Ion (usually containing Oxygen)		
			PO <sub>4</sub> <sup>3-</sup> Phosphate		
			SO <sub>4</sub> <sup>2-</sup> Sulfate		
			CO <sub>3</sub> <sup>2-</sup> Carbonate		
			CrO <sub>4</sub> <sup>2-</sup> Chromate		
		Ammonia NH <sub>3</sub> (g)	NO <sub>3</sub> <sup>-</sup> Nitrate		
		Ammonium NH <sub>4</sub> <sup>+</sup>	ClO <sub>3</sub> <sup>-</sup> Chlorate		
			CH <sub>3</sub> COO <sup>-</sup> Acetate (or ethanoate)		C <sub>2</sub> H <sub>3</sub> O <sub>2</sub> <sup>-</sup>
Irregular Polyatomic		ONE extra oxygen	per	ate	
"O" not normal		ONE LESS oxygen		ite	
		TWO LESS oxygen	hypo	ite	
Properties					

Regular Polyatomic "oxy"

Ammonium

## Irregular Polyatomic Naming

Name of metal (roman numeral) if needed	name of irregular polyatomic ion
Ca <sub>3</sub> (PO <sub>5</sub> ) <sub>2</sub>	PO <sub>4</sub> <sup>3-</sup> phosphate
(NH <sub>4</sub> ) <sub>2</sub> SO <sub>3</sub>	PO <sub>5</sub> <sup>3-</sup> per phosphate
Fe(ClO <sub>6</sub> ) <sub>3</sub>	SO <sub>4</sub> <sup>2-</sup> sulfate
	ammonium sulfite
	Iron (VI) hypochlorite
	ClO <sub>3</sub> <sup>-</sup> chlorate

